GSM/GPRS/GPS Vehicle Tracker
Model XH-103R User Manual

Preface

Thank you for purchasing the tracker. This manual shows how to operate the device smoothly and correctly. Make sure to read this manual carefully before using this product. Please note that specification and information are subject to changes without prior notice in this manual.

Any change will be integrated in the latest release. The manufacturer assumes no responsibility for any errors or omissions in this document.

1. Function Introduction

Model XH-103R is a new product based on the GSM / GPRS network and GPS satellite positioning system, which set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety. It can track and monitor remote target by SMS or internet.

2. Applications and features

Vehicle rental/small team management

Features

1.ModelXH-103R use SIMcard,supportGSM850M/900M/1800M/1900M Four frequency network.

2、Support SMS / GPRS / Internet network data platform tracking, using TCP, UDP protocol transmission remote.

3、Support GPRS on-line re-connected automatically.

4、Support SMS / GPRS dual-mode switching

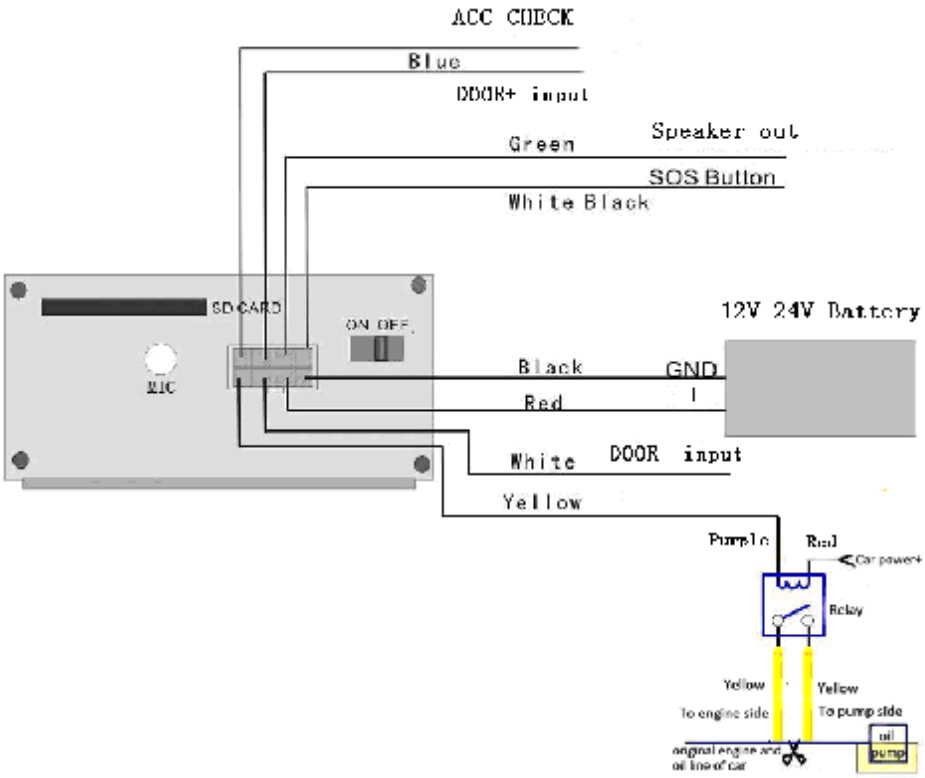
5、Support remote monitoring.

6、Support for point-to-point, point to group, group-to-group monitoring.

7、Set multiple functions of security, positioning, monitoring surveillance, emergency alarms and tracking in its entirety.

3. Wiring diagram

:



4. Specification

Content	Standard
Dim	66x111x27 mm
Weight	50g
Network	GSM/GPRS
Net frequency	850/900/1800/1900Mhz
Chip	SIRF3 chip
GSM/GPRS module	M35
GPS sensitivity	-159dBm
GPS accuracy	5m
Time to first initiate	Cold status 45s Warm status 35s Hot status 1s

Input voltage	**12—24V input**
Voltage of car power system	**12-24V input** **5V output**
Battery	**Chargeable changeable 3.7V 800mAh Li-ion battery**
Standby	**48hours**
Storage Temp.	**-40°C to +85°C**
Operation Temp.	**-20°C to +55°C**
Humidity	**5%--95% non-condensing**

5. Operating Instructions

First step: connection

1、 Find the matched wire, and insert the jack of the product.

2、Find the original car Oil pump control circuit，and cut it，the red contact engine side，the yellow wire contact the car oil tank side.

3.Connect the red and black wires (power cord of the unit) to the positive and negative electrodes of the car, red wire to + and black wire to -.

4.Connect urgent button with red and black wires.

5. Understanding the type of the door trigger is positive or negative trigger, and the corresponding line is connected to the gate control circuit,

so that when the door is opened, the terminal is in the deployed state, the door alarm is triggered.

6. Connect GPS antenna. GSM antenna

7. Insert the external monitoring microphone to monitoring jack.

2. SIM card installation

Make sure that there is no call transfer ， incoming call display is on, and PIN code turned off.. SMS must be plain text, can not recognize the PDU form. Open the SIM rear cover，Put the SIM card into the holder, and turn the foil right and fasten it in place.

3. Power on

Turn the switch to "ON"， and check whether GSM/GPS antenna is connected or not. At this time, the red light Begin to twinkle. In 10 to 40 seconds, the unit will begin to work and acquire the GSM as well as the GPS signals. The indicator will change to green and keep flashing every 3seconds. You can begin to set anything according to the user' guide.

5.1 Initiation

Send "#begin#password#" in SMS to the unit, it will reply "System Recover successfully" and initialize all the settings.

5.2 change the password

Send SMS"#password#old password #new password#"to change the

password.

After sending successfully the unit will reply with “The password has been successfully changed. The new password is ****”

5.2.2 Be sure keep the new password in mind, you have to upload the software to restore the original setting in case of losing the new password.

5.2.3 Make sure the new password is in 4 digits, or else the tracker can not recognize the password.

5.3 Authorization

Max five numbers authorized.

5.3.1 Set up master

Send sms“#master#” It will make the cell phone number as the authorized number。If set successfully, the unit will reply “welcome use GPS tracker ,the password is 1234”

5.3.2

Set up general user：

Send SMS“#user#phone number#”. All the other authorized number is set by the first authorized number. It will reply “The user number has been successfully changed. The new number is: **********.”

5.3.3 change master：send SMS “#new master# the administrator’s number (which want to change)#”, if the number is successfully authorized, the unit will reply “The new master number have been successfully, the new number is ********.”

5.3.4 delete user：Send SMS “#deluser # authorized number(which want to be delete)#” ,if the number deletes successfully, the unit will reply “Delete the user number *********successfully”.

5.4 Single locations

5.4.1 Without any authorized NO., dial the device, it will reply with Latitude and longitude information, while it won’t reply when dialing with an unauthorized NO. if there is an authorized No. stored.

5.4.2 when dialing the device with an authorized No, it will hang up and reply a real-time

Geo-info as below：

Lat: 22.636027N Long: 114.032210E,speed: 023.0 direction:270.0 tim:13/09/09 12:00

http://maps.google.com/?q=22.636027N, 114.032210E

URL：mobile phone click the URL link in the positioning message, can view the location map of the device (mobile phone must support WAP get online function)

5.5 Anto track

1. Send SMS“#auto#030s#005n#”to the device, it will report the Geo-info at 30s intervals for 5 times.(s: second, m: minute, h: hour). The setting must be in 3 Arabic numbers and at maximum 255 in value.

2. Send SMS “#auto#030s#***n#” to the unit, it will reply SMS heaps of times

3. cancel ： send“#offtn#”to the device。

Remark: Time interval must be more than 20 seconds

5.6 Monitoring

This function is that the user call the tracker, then listen in around of the

tracker.

5.7 the two convert command“ track” and ”monitor” between the two mode

5.7.1“track”（locate mode）is default statue.

5.7.2 send SMS“#monitor# ”to the unit， will reply it“monitor ok!”，changing to monitor mode.

5.7.3 send SMS #track#” to the unit， will reply tracker ok!” return to the locate mode.

5.8 Check IMEI

Send SMS“#imei#”to the device.

5.9 movement alarm

Set up: When the unit stays immobile in a place for 3-10 minutes, the user can send SMS “#move#” to the unit, and then the unit will reply “move alarm setting successfully!” In case of such a movement surpass 200 meters; it will reply SMS “Move+ the Geo-info to the authorized numbers. It will send an alarm SMS every 3 minutes when it surpass the limits.

Cancel: Send SMS “#offmove#” to deactivate the movement alert.

5.10 Over speed alert:

Set up: Send SMS “#speed#080#” to the unit (suppose the speed is 80km/h), and it will reply “speed ok!” When the target moves exceeding 80 km/h, the unit will send SMS “speed+080!+Geo-info to the authorized numbers. It will send an alarm SMS every 3 minutes.

Cancel: Send SMS “#offspeed#”to deactivate the over speed alert.

Remark: It is recommended that the speed alarm is set at not less than 50km/h. If the speed rate is too low may cause drift due to GPS signal is not accurate enough.

5.11 Urgent alarm

Press the SOS for 3 second; it will send SMS “help me! + Geo-info” to all the authorized numbers every 3 minutes. It will stop sending such a SMS when any authorized number reply SMS “#help#” to the tracker.

5.12 ACC alarm

When the tracker stays armed, If some one change ACC from OFF to ON illegally, It will send an alarm SMS every 3 minutes + latitude and longitude to the authorization number.

5.13 Door alarm

The user can customize the types of alarm triggered. For example: triggering by touching the car door or trunk. After triggered it will send SMS "Door alarm + longitude authorized numbers" every 3 minutes

The user can customize the types of alarm triggered. For example

triggering by touching the car door or trunk. After triggered it will send SMS "Door alarm + longitude authorized numbers" every 3 minutes.

Remark: it must be in arming statue.

How to set the terminal to arming statue：

Send a SMS“#arm#”to the device, it will reply with “Tracker is deactivated” if the device has been in defense state, no other operation.

After initiating this function, the unit will alarm when input alarm port change to 0.

How to set the terminal to disarming statue：

Send SMS“#disarm#”to the device, it will reply “Tracker is deactivated” if it has been in the Defence-canceling state, no other operation.

5.14 Cut off the Oil and Power

when a car is being stolen, and on alarm，send SM“#off#1234#”(1234 is device password)，to the device，the device will be the vehicle circuit or oil circuit to cut off, the terminal will be record the state until the center issued recovery instruction.

5.15 Resume the Oil and Power

Send the SMS “#resume#1234#”to the device(1234 is device password), recovery of oil and the engine.

5.16 Modify time

Send SMS: “#time#time zone#”, it will reply “ time is set successfully” if it is successfully set. It will reply: “Time zone OK”

5.17 GPRS setting

Generally, user don’t need to set the server parameter before use, The factory has set the right server parameter. If the tracker can’t connect server, please reference to the following:

5.17.1 Setting an IP address and port:

Send SMS “#ip #IP address #port# ”

If set up successfully, the tracker will reply SMS “setting IP address ,port set up successfully”.

For example : " #adminip # 123.183.212.133 #8067# ” (Default Mode)

Cancel: Send SMS "#delip#" to cancel the setting, It will reply “ IP address delete successfully”.

5.17.2 **Set APN**

Send SMS “ #apn#APN CONTENT#user name#password# ”,as soon as APN has been set up, the tracker will reply SMS“APN setting successfully”.

Send SMS “#apn#safaricom#saf#data# " it will reply “APN ok”.

5.18 **SMS Mode & GPRS (HSDPA) Mode**

Send SMS "#smgp#1#" for SMS mode. (Default Mode)

Need to send SMS "#smgp#0#" to set up GPRS mode if you use software of monitoring center on PC.

Please reference to monitoring software instruction of the disk after set up GPRS mode.

6. **Cautions**

1. Keep the unit dry. Any liquid, ie rain, moisture, may destroy or damage the inside circuitry.

2. Don't use & store the unit in dusty places.

3. Don't put the unit in overheated or overcooled places.

4. Handle carefully. Don't vibrate or shake it violently.

5. Clear the unit with a piece of dry cloth. Don't clean in chemicals, detergent.

6. Don't paint the unit, this may cause some foreign materials left in between the parts.

7. Don't disassemble or refit the unit.

8. prior to use, please read the manual to understand the range of the level of the interface circuit, or else does not work or damage to the product.

7 Trouble-shooting

Faults	Solution
Start failed	Check the power and see if it is fully charged or Correctly installed.
Hang up failed	In existence of an authorized number, an unauthorized Number won't be hang up. Please initialize the unit and program it again.
Monitoring failed	Check the unit authorization number or not.
Position information is all zeros	Go to the outdoor open equipment.